

# 静电场的几个可能的解析解

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**摘要:** 如果这几个可能的静电场的解析解是对的, 那么我们能直接得到基本物理常数之间的关系式。

**关键词:** 万有引力常数, 静电场, 基本原子质量, 质子半径。

$$\left\{ \begin{array}{l} 1. \frac{(e_0)^2}{(4\pi)(\epsilon_0)(a_0)^2} = \frac{(m_e)[\alpha_0]^2(c)^2}{(a_0)} \\ 2. \left[ \frac{(e_0)}{(4\pi)(\epsilon_0)} \right]^2 / (e_0) = \frac{1}{2} (m_e)[\alpha_0]^2(c)^2 / (e_0) = \frac{(m_{\text{atom}})(c)^2}{(2\pi)(R_\infty)} / (e_0) = 13.6 \\ 3. \left[ \frac{(e_0)}{(4\pi)(\epsilon_0)(a_0)} \right]^2 = \left[ \frac{(m_{\text{atom}})(G_N)}{(4\pi)(a_0)^2(2\pi)^2(a_0)^2} \right]^2 = \frac{(m_{\text{atom}})}{(2\pi)^4(r_a)(r_e)(R_\infty)(a_0)} = \frac{(m_e)(m_{\text{atom}})(R_\infty)}{(4\pi)(a_0)^2(2\pi)^2(a_0)^2(2\pi)(r_a)} \end{array} \right.$$

**参考文献:** 无。

# Several possible analytical solutions for electrostatic fields

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**Abstract:** If the analytical solutions for these possible electrostatic fields are correct, then we can directly obtain the relationship between the basic physical constants.

**Key words:** universal Gravitational constant, electrostatic field, basic atomic mass, proton radius.

$$\left\{ \begin{array}{l} 1. \frac{(e_o)^2}{(4\pi)(\epsilon_o)(a_o)^2} = \frac{(m_e)[\alpha_o]^2(c)^2}{(a_o)} \\ 2. \left[ \frac{(e_o)}{(4\pi)(\epsilon_o)} \right]^2 / (e_o) = \frac{1}{2} (m_e)[\alpha_o]^2(c)^2 / (e_o) = \frac{(m_{atom})(c)^2}{(2\pi)(R_\infty)} / (e_o) = 13.6 \\ 3. \left[ \frac{(e_o)}{(4\pi)(\epsilon_o)(a_o)} \right]^2 = \left[ \frac{(m_{atom})(G_N)}{(4\pi)(a_o)^2(2\pi)^2(a_o)^2} \right]^2 = \frac{(m_{atom})}{(2\pi)^4(r_a)(r_e)(R_\infty)(a_o)} = \frac{(m_e)(m_{atom})(R_\infty)}{(4\pi)(a_o)^2(2\pi)^2(a_o)^2(2\pi)(r_a)} \end{array} \right.$$

**Reference:** none.